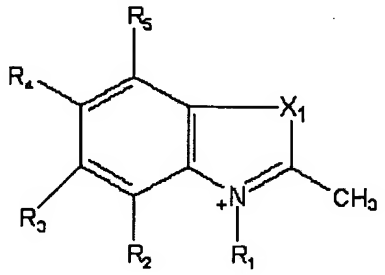
Amendments to the Claims:

Please amend the claims as follows:

287. (CURRENTLY AMENDED) A process for preparing a cyanine dye labeling reagent, said process comprising the steps of:

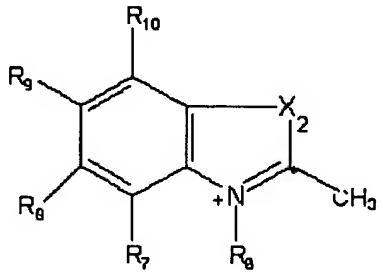
(a) providing:

(i) a first intermediate compound comprising:



wherein X_1 comprises carbon, oxygen, nitrogen or sulfur; and

(ii) a second intermediate compound comprising:

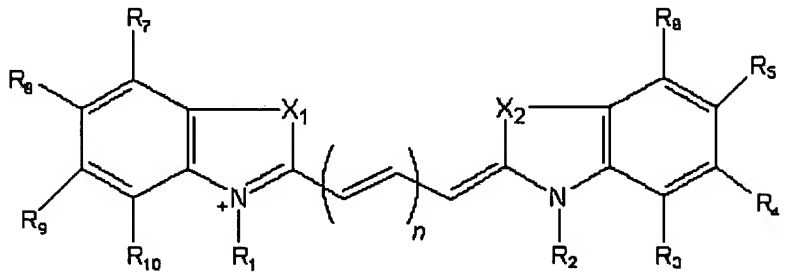


wherein X_2 comprises carbon, oxygen, nitrogen or sulfur;

wherein at least one of R_1 through R_{10} comprises a reactive group capable of forming a carbon-carbon linkage with a target, and

(iii) linking reagents suitable for linking said first intermediate compound and said second intermediate compound;

(b) forming a reaction mixture comprising said first intermediate compound (i), said second intermediate compound (ii), and said linking reagents under conditions to link (i) and (ii) to form



wherein at least one of R_1 through R_{10} comprises a reactive group capable of forming a carbon-carbon linkage with a target, wherein said reactive group comprises an alkene group, an alkyne group, ~~a halogenated compound~~ or a metallo-organic compound, and wherein *n* is an integer of 1, 2 or 3, and wherein X_1 and X_2 independently comprise carbon, oxygen, nitrogen or sulfur.

288. (CANCELLED) The process of claim 287, wherein said providing step, the reactive group comprises an alkene group, an alkyne group, a halogenated compound or a metallo-organic compound.

289. (PREVIOUSLY PRESENTED) The process of claim 287, wherein R1 through R10 independently comprise hydrogen, C_1-C_6 alkyl, a C_1-C_4 alkyl group having a hydrophilic substituent comprising sulfonate, carboxylate, hydroxyl, substituted amines and quaternary amines, aliphatic, alkenes, alkynes, charged or polar groups, or combinations of any of the foregoing.

290. (PREVIOUSLY PRESENTED) The labeling reagent of claim 288, wherein said metallo-organic compound comprises mercury, zinc, copper or platinum.

291. (PREVIOUSLY PRESENTED) The labeling reagent of claim 288, wherein said metallo-organic compound comprises an alkene group or an alkyne group.

292. (PREVIOUSLY PRESENTED) The process of claim 287, wherein said reactive group attached to said compound formed in step b further comprises a backbone that comprises at least two consecutive peptide bonds.

293. (CURRENTLY AMENDED) The process of claim ~~287~~ 292, wherein at least one of said two consecutive peptide bonds are separated by a single atom.

294. (PREVIOUSLY PRESENTED) The process of claim 293, wherein said single atom comprises C, N, S, O or P.

295. (PREVIOUSLY PRESENTED) The process of claim 292, wherein said backbone comprises one or more carbon atoms.

296. (PREVIOUSLY PRESENTED) The process of claim 292, wherein said backbone comprises at least one non-carbon atom.

297. (PREVIOUSLY PRESENTED) The process of claim 296, wherein said non-carbon atom comprises sulfur, oxygen or nitrogen.

298. (PREVIOUSLY PRESENTED) The process of claim 292, wherein said backbone further comprises at least one additional moiety comprising peptide bonds,

amino acids, aliphatic chains from C_1 through C_{20}, alkene groups, alkyne groups, saturated or unsaturated or partially saturated rings, heterocyclic rings and sugars.

299. (PREVIOUSLY PRESENTED) The process of claim 292, wherein said backbone comprises a di-peptide or an oligo-peptide.

300. (PREVIOUSLY PRESENTED) The process of claim 299, wherein said di-peptide or oligo-peptide comprises $(glycine)_2$ or $(glycine)_4$.

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